



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Attorney Docket Number	3382-66145-01
Application Number	10/737,205
Filing Date	December 15, 2003
First Named Inventor	Chilimbi
Art Unit	2186
Examiner Name	Not yet assigned

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
MPE		6,360,361	3/19/2002	Larus et al.
MPE		6,330,556	12/11/2001	Chilimbi et al.
MPE		6,321,240	11/20/2001	Chilimbi et al.
MPE		5,940,618	8/17/1999	Urquhart et al.
MPE		2005/0091645	4/28/2005	Chilimbi et al.
MPE		2004/0103408	5/27/2004	Chilimbi et al.
MPE		2004/0103401	5/27/2004	Chilimbi et al.
MPE		2004/0025145	2/5/2004	Dawson
MPE		2002/0144245	10/3/2002	Lueh
MPE		11/134,812	5/20/2005	Ganapathy et al.
MPE		11/134,796	5/20/2005	Shankar et al.
MPE		11/115,924	4/26/2005	Chilimbi et al.

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
MPE		Ammons et al., "Exploiting Hardware Performance Counters with Flow and Context Sensitive Profiling", PLDI (June 1997), 12 pages.
MPE		Ammons et al., "Improving Data-Flow Analysis with Path Profiles," SIGPLAN '98 (1998), pages 72-84.
MPE		Anderson et al., "Continuous Profiling: Where Have All the Cycles Gone?", ACM (November 1997), pages 357-390.

EXAMINER
SIGNATURE:

Mark P. Francis

DATE

CONSIDERED:

2/16/07

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Attorney Docket Number	3382-66145-01
		Application Number	10/737,205
		Filing Date	December 15, 2003
		First Named Inventor	Chilimbi
		Art Unit	2186
		Examiner Name	Not yet assigned
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS	
MPF		Annaram et al., "Data Prefetching by Dependence Graph Precomputation", IEEE (2001), pages 52-61.	
MPF		Arnold et al., "A Framework for Reducing the Cost of Instrumented Code", <i>Rutgers University Technical Report DCS-TR-424</i> (November 2000), pages 1-10.	
MPP		Bala et al., "Dynamo: A Transparent Dynamic Optimization System", ACM (2000), pages 1-12.	
MPF		Balakrishnan et al., "Analyzing Memory Accesses in x86 Binary Executables", <i>Proc. 13th Intl. Conference on Compiler Construction</i> , LNCS 2985 (April 2004), pages 5-23.	
MPF		Ball et al., "Efficient Path Profiling", IEEE (1996), pages 46-57.	
MPF		Bush et al., "A Static Analyzer for Finding Dynamic Programming Errors", <i>Software: Practice and Experience</i> (2000), pages 775-802.	
MPF		Cahoon et al., "Data Flow Analysis for Software Prefetching Linked Data Structures in Java", IEEE (2001), 12 pages.	
MPF		Chen et al., "Reducing Memory Latency via Non-Blocking and Prefetching Caches", ACM (1992), pages 51-61.	
MPF		Chilimbi et al., "Dynamic Hot Data Stream Prefetching for General-Purpose Programs", ACM (2002), 11 pages.	
MPF		Chilimbi et al., "Low-Overhead Memory Leak Detection Using Adaptive Statistical Profiling", <i>Proc. 11th Intl. Conference on Architectural Support for Programming Language and Operating Systems (ASPLOS)</i> , (October 2004), pp. 156-164.	
MPF		Chilimbi et al., "Using Generational Garbage Collection to Implement Cache-Conscious Data Placement", <i>Proceedings of the First International Symposium on Memory Management</i> (Oct 1998), Vol. 34(3), pages 37-48.	
MPF		Cooksey et al., "A Stateless, Content-Directed Data Prefetching Mechanism", ACM (2002), pages 279-290.	
MPF		Cowan et al., "Buffer Overflows: Attacks and Defenses for the Vulnerability of the Decade", <i>DARPA information survivability conference and expo (DISCEX)</i> (2000), pages 1-11.	
MPF		Dean et al., "ProfileMe: Hardware Support for Instruction-Level Profiling on Out-of-Order Processors", <i>Proc. 30th Annual Intl. Symp. On Microarchitecture</i> (Dec 1997), 12 pages.	

EXAMINER SIGNATURE: <u>Mark P. Francis</u>	DATE CONSIDERED: <u>2/16/07</u>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Attorney Docket Number	3382-66145-01
	Application Number	10/737,205
	Filing Date	December 15, 2003
	First Named Inventor	Chilimbi
	Art Unit	2186
	Examiner Name	Not yet assigned

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
MPF		Deaver et al., "Wiggins/Redstone: An On-line Program Specializer", <i>Proceedings of the IEEE Hot Chips XI Conference</i> (August 1999), 29 pages.
MPF		Demsky et al., "Automatic Detection and Repair of Errors in Data Structures", <i>Proceedings of 18th ACM SIGPLAN Conference on Object-Oriented Programming Systems, Language and Applications (OOPSLA)</i> (October 2003), pages 78-95.
MPF		Demsky et al., "Role-Based Exploration of Object-Oriented Programs", <i>Proceedings of 24th International Conference on Software Engineering (ISCE)</i> (May 2002), pages 313-334.
MPF		Dor et al., "Cleanness Checking of String Manipulations in C Programs via Integer Analysis", <i>Proc. 8th Int'l Static Analysis Symposium</i> (June 2001), 19 pages.
MPF		Dor et al., "CSSV: Towards a Realistic Tool for Statically Detecting All Buffer Overflows in C", <i>PLDI'03</i> (June 9-11, 2003), pp. 155-167.
MPF		Duesterwald et al., "Software profiling for hot path prediction: Less is more," <i>Ninth International Conference on Architectural Support for Programming Languages and Operating Systems</i> (November 2000), pages 202-211.
MPF		Edwards, "Black-Box Testing Using Flowgraphs: An Experimental Assessment of Effectiveness and Automation Potential", <i>Software Testing, Verification and Reliability</i> , Vol. 10, No. 4 (December 2000), pages 249-262.
MPF		Eeckhout et al., "Workload Design: Selecting Representative Program-Input Pairs", <i>Proceedings of the 2002 International Conference on Parallel Architectures and Compilation Techniques</i> (2002), 12 pages.
MPF		Ernst, "Dynamically Discovering Likely Program Invariants", <i>PhD Thesis, University of Washington</i> (August 2000), pages 1-127.
MPF		Evans et al., "Improving Security Using Extensible Lightweight Static Analysis", <i>IEEE Software</i> (January/February 2002), pages 42-51.
MPF		Evans et al., "LCLint: A Tool for Using Specifications to Check Code", <i>SIGSOFT Symposium on the Foundations of Software Engineering</i> (December 1994), 10 pages.
MPF		Evans et al., "Splint Manual, Version 3.1.1-1", <i>Secure Programming Group, University of Virginia Department of Computer Science</i> (June 5, 2003), 121 pages.
MPF		Evans, "Static Detection of Dynamic Memory Errors", <i>SIGPLAN Conf. on Programming Language and Design Implementation</i> (May 1996), 10 pages.
MPF		Evans, "Using Specifications to Check Source Code", <i>TR-628, MIT Lab for Computer Science</i> (June 1994), 97 pages.

EXAMINER SIGNATURE: <u>Mark P. Francis</u>	DATE CONSIDERED: <u>2/16/07</u>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Attorney Docket Number	3382-66145-01
		Application Number	10/737,205
		Filing Date	December 15, 2003
		First Named Inventor	Chilimbi
		Art Unit	2186
		Examiner Name	Not yet assigned
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS	
MPF		Foster et al., "A Theory of Type Qualifiers", <i>Proc. ACM SIGPLAN '99 Conf. on Programming Language and Design Implementation (PLDI)</i> (May 1999), 12 pages.	
MPF		Guyer et al., "An Annotation Language for Optimizing Software Libraries", <i>Proc. Second Conf. on Domain Specific Languages</i> (October 1999), 14 pages.	
MPF		Hangal et al., "Tracking Down Software Bugs Using Automatic Anomaly Detection", <i>Proceedings of 22nd International Conference on Software Engineering (ICSE)</i> (January 1992), pages 125-136.	
MPF		Harris, "Dynamic Adaptive Pre-tenuring", <i>Proceedings of the International Symposium on Memory Management</i> (Oct 2000), 9 pages.	
MPF		Hastings et al., "Purify: Fast Detection of Memory Leaks and Access Errors", <i>Proceedings of the Winter 1992 USENIX Conference</i> (1992), 10 pages.	
MPF		Heil et al., "Relational Profiling: Enabling Thread-Level Parallelism in Virtual Machines", <i>Proc. 33rd International Symposium on Microarchitecture</i> (Dec 2000), pages 1-10.	
MPF		Hirzel et al., "Understanding the Connectivity of Heap Objects", <i>Proceedings of International Symposium on Memory Management (ISMM)</i> (June 2002), pages 143-156.	
MPF		Hollingsworth et al., "MDL: A Language and Compiler for Dynamic Program Instrumentation", <i>Proc. Of the International Conference on Parallel Architectures and Compilations Techniques</i> (November 1997), 12 pages.	
MPF		Hölzle et al., "Reconciling Responsiveness with Performance in Purse Object-Oriented Languages", <i>ACM Transactions on Programming Languages and Systems</i> (July 1996), pages 1-40.	
MPF		Horning, "The Larch Shared Language: Some Open Problems", <i>Compass/ADT Workshop</i> (September 1995), 16 pages.	
MPF		Joseph et al., "Prefetching Using Markov Predictors", <i>ACM</i> (1997), pages 252-263.	
MPF		Jouppi, "Improving Direct-Mapped Cache Performance by the Addition of a Small Fully-Associative Cache and Prefetch Buffers", <i>IEEE</i> (1990), pages 364-373.	
MPF		"JProfiler Manual," ejtechnologies, GmbH (2004), pages 1-141.	
MPF		Karlsson et al., "A Prefetching Technique for Irregular Accesses to Linked Data Structures", <i>Sixth International Symposium on High-Performance Computer Architecture</i> (January 2000), 12 pages.	
MPF		Khurshid et al., "An Analyzable Annotation Language," <i>OOPSLA '02</i> (November 2002), 15 pages.	
EXAMINER SIGNATURE: <i>Mark P. Francis</i>		DATE CONSIDERED: <i>2/17/07</i>	
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.			

INFORMATION DISCLOSURE STATEMENT BY APPLICANT	Attorney Docket Number	3382-66145-01
	Application Number	10/737,205
	Filing Date	December 15, 2003
	First Named Inventor	Chilimbi
	Art Unit	2186
	Examiner Name	Not yet assigned

Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS
MPF		Klaiber et al., "An Architecture for Software-Controlled Data Prefetching", ACM (1991), pages 43-53.
MPF		Kramer, "Examples of Design by Contract in Java Using Contract, the Design by Contract™ Tool for Java™", <i>Object World Berlin '99, Design & Components</i> (May 17-20, 1999), 26 pages.
MPF		Larochelle et al., "Statistically Detecting Likely Buffer Overflow Vulnerabilities", <i>2001 USENIX Security Symposium</i> (August 2001), 5 pages.
MPF		Larus, "Whole Program Paths," <i>SIGPLAN '99 Conference on Programming Languages and Design</i> (1999), 11 pages.
MPF		Leavens et al., "Enhancing the Pre-and Postcondition Technique for More Expressive Specifications", <i>Proc. World Congress on Formal Methods in the Development of Computing Systems</i> (September 1999), 21 pages.
MPF		Leavens et al., "Preliminary Design of JML", <i>Technical Report 98-06v, Iowa State University Department of Computer Science</i> (June 1998-2003; revised May 2003), 94 pages.
MPF		Leino, "Checking Correctness Properties of Object-Oriented Programs," <i>Internet</i> , http://research.microsoft.com/leino/paper/1 (August 19, 2002), 49 pages.
MPF		Luk et al., "Compiler-Based Prefetching for Recursive Data Structures", ACM (1996), pages 222-233.
MPF		Melski et al., "Interprocedural Path Profiling", <i>University of Wisconsin</i> (1998), pages 1-50.
MPF		Microsoft Corporation, "Scalable Program Analysis", <i>Internet</i> , http://research.microsoft.com/spa/ (downloaded on September 5, 2003), 3 pages.
MPF		Mowry et al., "Design and Evaluation of a Compiler Algorithm for Prefetching", ACM (1992), pages 62-73.
MPF		Mowry et al., "Predicting Data Cache Misses in Non-Numeric Applications Through Correlation Profiling", <i>International Symposium on Microarchitecture</i> (1997), 7 pages.
MPF		Nevill-Manning et al., "Identifying Hierarchical Structure in Sequences: A Linear-time Algorithm", <i>Journal of Artificial Intelligence Research</i> (1997), 7:67-82.
MPF		Roth et al., "Dependence Based Prefetching for Linked Data Structures", <i>Proceedings of the 8th International Conference on Architectural Support</i> (Oct 1998), pages 115-126.
MPF		Roth et al., "Effective Jump-Pointer Prefetching for Linked Data Structures", IEEE (1999), pages 111-121.

EXAMINER SIGNATURE: <i>Mark P. Francis</i>	DATE CONSIDERED: <i>2/16/07</i>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Attorney Docket Number	3382-66145-01
		Application Number	10/737,205
		Filing Date	December 15, 2003
		First Named Inventor	Chilimbi
		Art Unit	2186
		Examiner Name	Not yet assigned
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS	
MPF		Saavedra et al., "Improving the Effectiveness of Software Prefetching With Adaptive Execution", <i>IEEE</i> (1996), pages 68-78.	
MPF		Sastry et al., "Rapid Profiling Via Stratified Sampling", <i>International Symposium on Computer Architecture</i> (2001), pages 1-12.	
MPF		Savage et al., "Eraser: a dynamic data race detector for multithreaded programs", <i>ACM Transactions on Computer Systems (TOCS)</i> (1997), 391-411.	
MPF		Srivastava et al., "Vulcan Binary Transformation in a Distributed Environment", <i>Microsoft Research, MSR-TR-99-76</i> (April 20, 2001), pages 1-12.	
MPF		Stoutchinin et al., "Speculative Prefetching of Induction Pointers", <i>Proceedings of 10th International Conference on Compiler Construction</i> (2001), 15 pages.	
MPF		"Technologies for Measuring Software Performance", <i>Intel Corporation</i> (2003), 4 pages.	
MPF		Traub et al., "Ephemeral instrumentation for lightweight program profiling", <i>Technical report, Harvard University</i> (2000), pages 1-13.	
MPF		Vanderwiel et al., "Data Prefetch Mechanisms", <i>ACM Computing Surveys</i> , Vol. 32, No. 2 (June 2000), pages 174-199.	
MPF		Wahls et al., "The Direct Execution of SPECS-C++: A Model-Based Specification Language for C++ Classes", <i>Technical Report TR94-02b, Iowa State University Department of Computer Science</i> (November 18, 1994), 52 pages.	
MPF		Zhou et al., "AccMon: Automatically Detecting Memory-Related Bugs via Program Counter-Based Invariants," <i>Proceedings of 37th International Symposium on Micro-Architecture (MICRO)</i> (December 2004).	
MPF		Zilles et al., "A Programmable Co-processor for Profiling", <i>Proceedings of the 7th International Symposium on High Performance Architecture</i> (Jan 2001), 12 pages.	

EXAMINER SIGNATURE: <i>Mark P. Francis</i>	DATE CONSIDERED: <i>2/16/07</i>
* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.	

10/

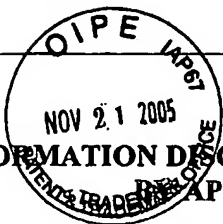
INFORMATION DISCLOSURE STATEMENT BY APPLICANT		Attorney Docket Number	3382-66145
		Application Number	To be assigned
		Filing Date	Concurrently herewith
		First Named Inventor	Chilimbi et al.
		Art Unit	To be assigned
		Examiner Name	To be assigned
Examiner's Initials*	Cite No. (optional)	OTHER DOCUMENTS	
MPPF		Kistler et al., "Automated Data-Member Layout of Heap Objects to Improve Memory-Hierarchy Performance," <i>ACM Transactions on Programming Language and Systems</i> , 16 pp. (2000).	
MPPF		Halldorsson, "Approximations of Weighted Independent Set and Hereditary Subset Problems," <i>JGAA</i> , Vol. 4, No. 1, pp. 1-16 (April 2000).	
MPPF		Hirzel et al., "Bursty Tracing: A Framework for Low-Overhead Temporal Profiling," <i>Microsoft Research</i> , 10 pp. (2001).	
MPPF		Gloy et al., "Procedure Placement Using Temporal-Ordering Information," <i>ACM Transactions on Programming Languages and System</i> , Vol. 21, pp.111-161 (1999).	
MPPF		Chilimbi et al., "Cache-Conscious Structure Definition," <i>Proc. ACM SIGPLAN '99 Conf. on Programming Language Design and Impl.</i> , 12 pp. (May 1999).	
MPPF		Chilimbi et al., "Cache-Conscious Structure Layout," <i>Proc. ACM SIGPLAN '99 Conf. on Programming Language Design and Impl.</i> , 12 pp. (May 1999).	
MPPF		Seidl et al., "Segregating Heap Objects by Reference Behavior and Lifetime," <i>Eighth Int'l Conf. on Architectural Support for Programming Languages and Operating Systems</i> , 12 pp. (October 1998).	
MPPF		Petranc et al., "The Hardness of Cache Conscious Data Placement," <i>29th Annual ACM Symposium on Principles of Programming Languages</i> , 33 pp. (2002).	
MPPF		Rubin et al., "An Efficient Profile-Analysis Framework for Data-Layout Optimizations," <i>POPL</i> , 14 pp. (January 2002).	
MPPF		Chilimbi, "On the Stability of Temporal Data Reference Profiles," <i>Int'l Conf. on Parallel Architectures and Compilation Techniques</i> , 10 pp. (September 2001).	
MPPF		Chilimbi, "Efficient Representations and Abstractions for Quantifying and Exploiting Data Reference Locality," <i>ACM SIGPLAN '01 Conf. on Programming Language Design and Implementation</i> , 12 pp. (June 2001).	
MPPF		Calder et al., "Cache-Conscious Data Placement," <i>ACM</i> , 11 pp. (1998).	
MPPF		Berger et al., "Composing High-Performance Memory Allocators," <i>ACM</i> , 11 pp. (2001).	
MPPF		Crescenzi et al., "A Compendium of NP Optimization Problems," 20 pp. [Downloaded from the World Wide Web on December 12, 2003].	
MPPF		Truong et al., "Improving Cache Behavior of Dynamically Allocated Data Structures," <i>PACT</i> , 8 pp. (1998).	

EXAMINER SIGNATURE: Mark P. Francis

DATE CONSIDERED:

1/29/07

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



INFORMATION DISCLOSURE STATEMENT TO THE APPLICANT

Attorney Docket Number	3382-66145-01
Application Number	10/737,205
Filing Date	December 15, 2003
First Named Inventor	Chilimbi
Art Unit	2186
Examiner Name	Not yet assigned

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
MPF		6,848,029	1/25/2005	Coldewey
MPF		6,704,860	3/9/2004	Moore
MPF		6,675,374	1/6/2004	Pieper et al.
MPF		6,571,318	5/27/2003	Sander et al.
MPF		6,560,693	5/6/2003	Puzak et al.
MPF		6,311,260	10/30/2001	Stone et al.
MPF		5,953,524	9/14/1999	Meng et al.
MPF		5,925,100	7/20/1999	Drewry et al.
MPF		5,774,685	6/30/1998	Dubey

EXAMINER
SIGNATURE:

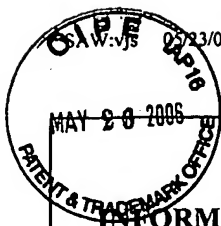
Mark P. Francis

DATE

CONSIDERED:

2/16/07

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.



02/23/06 3382-66145-01 531436.doc 301460.02

**INFORMATION DISCLOSURE STATEMENT
BY APPLICANT**

Attorney Docket Number	3382-66145-01
Application Number	10/737,205
Filing Date	December 15, 2003
First Named Inventor	Chilimbi
Art Unit	2186
Examiner Name	Not yet assigned

U.S. PATENT DOCUMENTS

Copies of U.S. Patent documents do not need to be provided, unless requested by the Patent and Trademark Office. For patents, provide the patent number and the issue date. For published U.S. applications, provide the publication number and the publication date. For unpublished pending patent applications, provide the application number and the filing date.

Examiner's Initials*	Cite No. (optional)	Number	Publication Date	Name of Applicant or Patentee
MPP		5,740,443	04-1998	Carini
MPP		5,815,720	09-1998	Buzbee
MPP		5,909,578	06-1999	Buzbee
MPP		5,950,003	09-1999	Kaneshiro et al.
MPP		5,960,198	09-1999	Roediger et al.
MPP		6,026,234	02-2000	Hanson et al.
MPP		6,079,032	06-2000	Peri
MPP		6,148,437	11-2000	Shah et al.
MPP		6,651,243	11-2003	Berry et al.
MPP		2004/0015930	01-2004	Wu

EXAMINER
SIGNATURE: *Mark P. Francis*DATE
CONSIDERED: *2/17/07*

* Examiner: Initial if reference considered, whether or not in conformance with MPEP 609. Draw line through cite if not in conformance and not considered. Include copy of this form with next communication to applicant.